



The diagram shows a 4-channel PWM motor driver circuit. A Mini-Melf (Melf LL34) module is used, which contains four MOSFETs (T1, T2, T3, T4) and four diodes (D1, D2, D3, D4). The module is powered by VBAT. The driver is controlled by four PWM signals (PWM1, PWM2, PWM3, PWM4) through 10k resistors (R1, R2, R3, R4) connected to GND. The motor terminals (M1+, M1-, M2+, M2-, M3+, M3-, M4+, M4-) are connected to GND.

The circuit diagram shows a 4-bit DAC. It consists of four op-amp buffers (U1, U2, U3, U4) and four resistors (R1, R2, R3, R4). The inputs of the buffers are connected to the digital inputs A, B, C, and D. The outputs of the buffers are connected to the non-inverting inputs of the op-amp buffers. The resistors are connected between the outputs of the buffers and the inverting inputs of the op-amp buffers. The inverting inputs of the op-amp buffers are also connected to ground. The output of the DAC is taken from the output of the last op-amp buffer (U4).

[illegible]

The diagram illustrates the PDI Program Debug Interface circuit. A JP5 header is used to connect the PDI signals. The connections are as follows:

- Pin 1: PDI_D+
- Pin 3: PDI_D-
- Pin 5: PDI_C
- Pin 6: RST
- Pin 7: 330-1000PF capacitor to GND
- Pin 8: GND

MC1	
VCC	PA0(ADC0,AC0,AREF)
VCC	PA1(ADC1,AC1)
	PA2(ADC2,AC2)
VDD	PA3(ADC3,AC3)
	PA4(ADC4,AC4)
AVCC	PA5(ADC5,AC5)
	PA6(ADC6,AC6,AC10UT)
GND	PA7(ADC7,AC7,AC00UT)
GND	
GND	PB0(ADC8,AREF)
GND	PB1(ADC9)
	PB2(ADC10,DAC0)
	PB3(ADC11,DAC1)
PR0(XTAL2,TOSC2)	PC0(OC0A,OC0A1S,SDA)
PR1(XTAL1,TOSC1)	PC1(OC0B,OC0AHS,XCK0,SCL)
	PC2(OC0C,OC0BLS,RXD0)
	PC3(OC0D,OC0BHS,TXD0)
	PC4(OC0CL,OC1A,SS)
PDI(PDI_DATA)	PC5(OC0CHS,OC1B,XCK1,MOSI)
/RESET(PDI_CLOCK)	PC6(OC0DL,RXD1,MISO,CLK)
	PC7(OC0DHS,TXD1,SKC,EVOUT,CLK)
	PD0(OC0A)
	PD1(OC0B,XCK0)
	PD2(OC0C,RXD0)
	PD3(OC0D,TXD0)
	PD4(OC1A,SS)
	PD5(OC1B,XCK1,MOSI)
	PD6(D+,RXD1,MISO)
	PD7(D+,TXD1,SKC,CLK,EVOUT)
	PE0(OC0A,SDA)
	PE1(OC0B,XCK0,SCL)
	PE2(OC0C,RXD0)
	PE3(OC0D,TXD0)

XMega3204-AU

PPM Eingang vom I

LEDs je une an einem Arm

BUSYLED1 BUSYLED2 BUSYLED3 BUSYLED4

R17 1k R16 1k R3 2k R15 2k

LED1 BL LED2 BL LED3 RD LED4 RD

GND GND GND GND

GND GND_

Matthias Kesenheimer	
Nanocopter	
26.06.12 07:30	
Sheet: 1/1	REV: 1.2